

IATA Updates

2017 ULD CARE Annual Conference Budapest, Hungary, 18-21 September 2017

IATA CARGO OPERATIONS UPDATE

Brendan SULLIVAN Andre MAJERES IATA Cargo

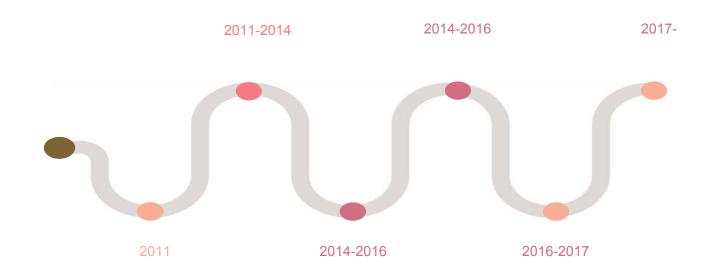


Agenda

IATA Cargo Handling Manual

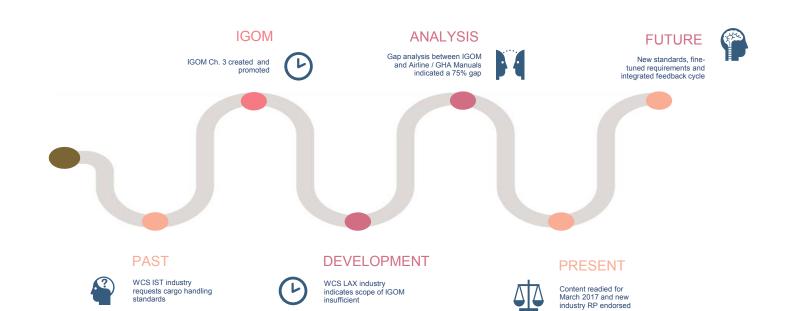


PAST, PRESENT, FUTURE





PAST, PRESENT, FUTURE





Analysis

Why so many airline CHMs?

As many airline CHMs in a warehouse as there are airlines handled.

What are the Gaps?

75% of what is contained in an airline CHM is not covered by current IATA Standards Scope.

Case Closed?

Sounds like it makes complete sense... right?

How many ways are there to accept Cargo?

Handle 50 airlines? Accept 50 different ways?

Can it be standardized?

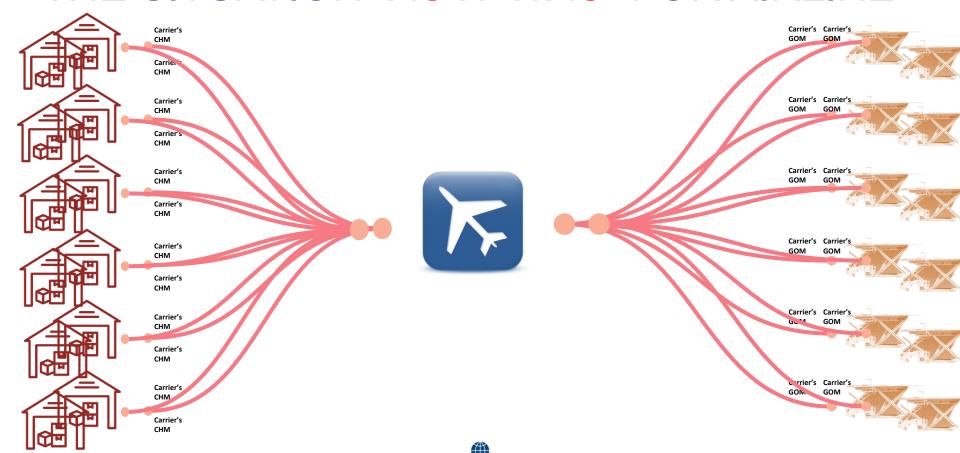
Nearly 90% of what isn't covered, could and should be standardized

What are the steps?

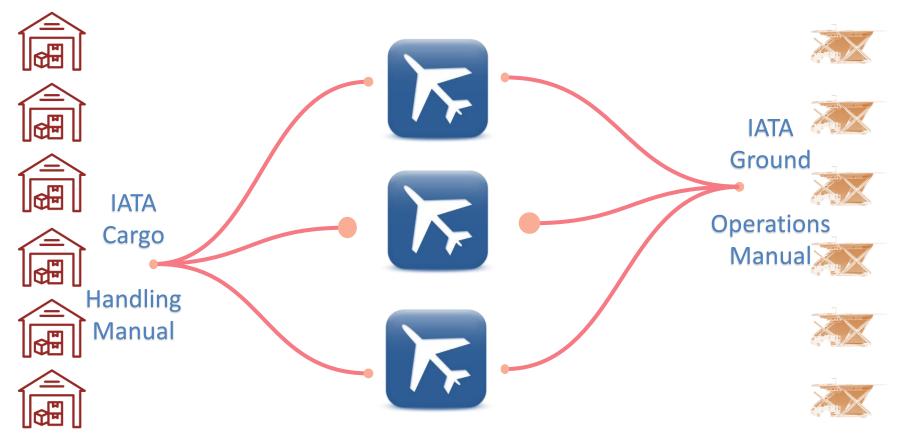
Content ideation > delivery mechanism > implementation tools > industry buy-in



THE SITUATION "AS IT WAS" FOR AIRLINE

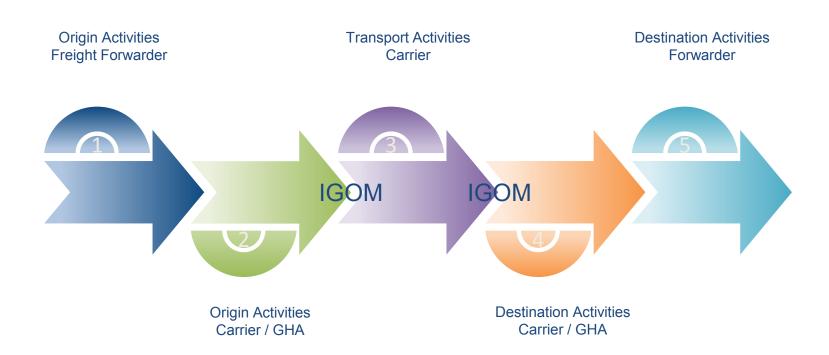


THE SITUATION "TO BE" FOR AIRLINE

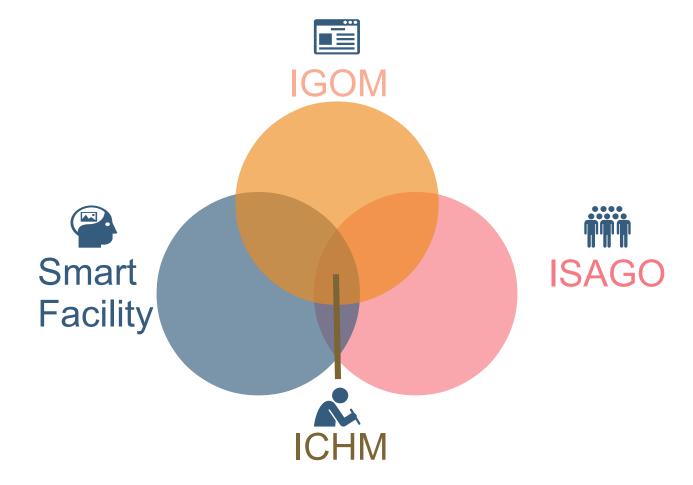




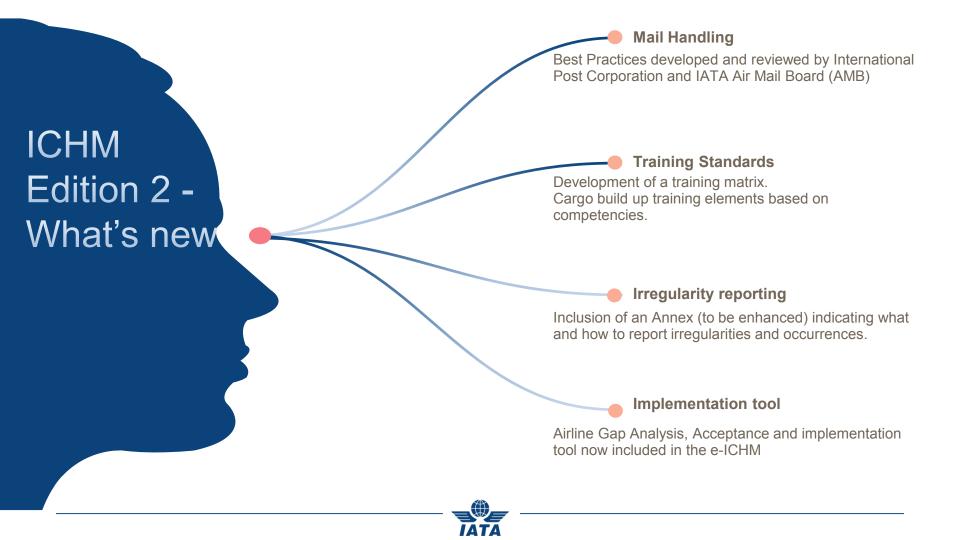
Cargo Handling Manual - Scope

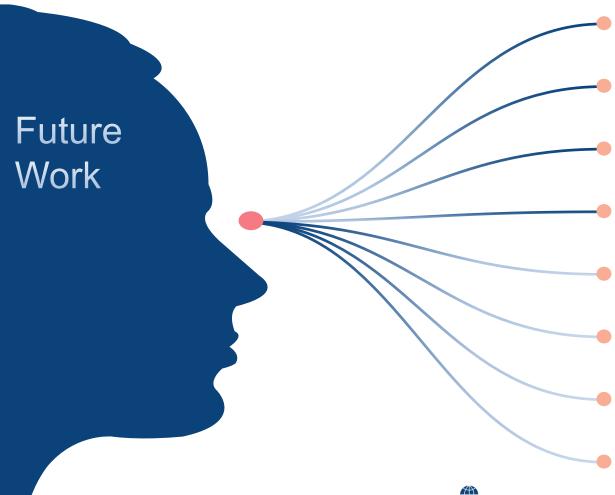












Freight Forwarders

Review and Development of sections 1 to 6 and 16 to 19 according to MOP

Training Standards

Further develop the competency based matrix

Irregularity reporting

Develop the what and how to report and standardize

Implementation

Get feedback from the airlines' gap analysis to improve and update the standards, acceptance and implementation processes.

ISAGO +

Include references to ISAGO.

Smart Facility Program

Update the Smart Facility program.

Cargo facility of the future

Include information on airport and cargo facility of the future.



Smart Facility Program





Smart Facility

Excellence in Air Cargo Handling



Vision

Cargo handling in airports will be safe, secure and efficient through the application of high-quality common standards in handling facilities and provided transparently. This will be verified through globally-accepted assessments, and reinforced by identifying best-in-class cargo handling facilities.

Background

Cargo handling is critically important within the air cargo supply chain and is performed at thousands of airports by hundreds of handlers, big and small. This represents a high potential risk for deviations in quality, adherence to standards and consistency of handling.

These issues will be addressed through 3 pillars:

- Self-Assessment via the checklist online and in the Cargo Handling Manual
- Smart Facility Readiness assessment to identify gaps prior to the remote 3rd party assessment, or the complete validation.
- Onsite 3rd Party Verification

#Keywords

- Smart Facility | Assessment
- IATA Cargo Handling Manual (ICHM)
- ISAGO | Quality | Audit
- Smart Facility Readiness
- Security & Standards
- Competence | competitiveness
- Transparency | efficiency
- Service level offerings

2017 Objectives

- Coordinate with ISAGO: new operational model and audit program
- Smart Facility recommended practice implementation
- Align standards in Cargo Handling Manual, ISAGO and Smart Facility
- Develop training (competencies)
- Develop appropriate tools to communicate the results (such as a Smart Facility map)













ACID

Better data for better decisions



Vision

An **Air Cargo Incident Database** of de-identified airline incident reports offers a secure environment for airlines and ground handlers to pool safety and operations information, supporting a proactive data-driven approach for advanced trend analysis, predictive risk mitigation and improvement programs.

Background

The Air Cargo Industry has been looking to IATA to establish some form of industry incident tracking mechanism to record & develop intelligence on incidents related to: lithium batteries, other dangerous goods, general cargo, and ULD's.

This database would enable IATA to see which areas need our attention, as well as track if incidents reduce following campaigns and actions by IATA and others

So as not to overburden the industry with reporting and double efforts, Cargo is discussing with SFO the feasibility of incorporating this into the Global Aviation Data Management (GADM) program.

#Keywords

- Database | Data Collection | Reporting
- Accidents | Incidents | Occurrences
- Safety | Operations | Security
- Database Of Ground
 Damage Incident Reports
 (GDDB) | Global Aviation
 Data Management (GADM) |
 STEADES

2017 Objectives

- Working with SFO on their safety Incidents Database project (starting with Dangerous Goods with DG team)
- Understanding industry needs, limitations and opportunities to evolve towards a global Incidents Database, surveying the industry
- Conducting a benchmark of existing incidents reporting practices in both air travel and logistics
- Identifying steps needed to develop such a data collection mechanism & identifying IATA's role
- Delivering position paper with next steps & IATA's role moving forward to IATA Cargo Committee and IATA Operations Committee.



ACID Status

- → Survey mid-June 2017 to airlines, ground handlers
- → Results analysis ongoing (over 200 respondents)

→ A primary goal to establish the process and database as part of the existing databases

Industry Survey Position Paper

→ Present a position based on survey results to Cargo Committee and Operations Committee (Oct 17).

DG Incidents

Taxonomy (descriptors) Work

- Identified the need for a common approach to incident descriptions.
- → Working with ASG and subgroups
- → Input provided by many CSC Subgroups

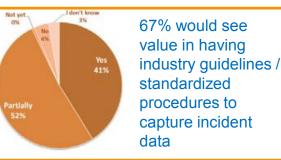


ACID survey – high-level results

- Survey from mid-June to end of July: 6 weeks
- 241 valid answers received
 - 172 from airline employees (110 unique airlines, including 86 IATA members)
 - 69 from cargo handlers employees (62 unique cargo handlers)



77% share / report all or part of the incident data they collect



64% would accept to share their air cargo incident data if IATA was to pursue with ACID project

Top 3 requirements

- Simplicity
- Data accuracy / quality
- Data protection

44% do not have any concerns / do not see any risks in having a database of global air cargo incidents 74% think the industry would benefit from a database of global air cargo incidents, 69% think their company would as well

ACID's value proposition

- Help drive continuous improvement and improve safety and quality
- Benchmarking tool, regular useful reports and publications
- Factual evidence to justify improvement programs, training, etc.
- Best practices sharing & learning (through regional/local workshops for instance)

If ultimate goal is to make ACID a centralized database recognized by all aviation bodies and used as the main platform for all air cargo incident reporting, investigation etc.

- Standard reporting process and tool
- Global participation / critical mass
- Buy-in from other stakeholders: GHAs, CAAs, etc.
- Harmonization of all IATA reporting tools





ISAGO New Model Status





ULD Updates

LIAO, Zhi Yong

Manager, Cargo Business Process & Standards, IATA

2017 ULD CARE Annual Conference Budapest, Hungary, 18-21 September 2017



Introduction of XML ULD Control Receipt (XUCR) Message



What is ULD Control Receipt (UCR)?

As per IATA CSC Recommended Practice 1654:

- when a unit load device (ULD), loaded or empty, is transferred, the Transferring Party shall provide the Receiving Party a receipt (in paper or electronic form) for the transferred unit(s) called ULD Control Receipt (UCR)
- The Transferring party shall be entitled to a confirmation (in paper or electronic form) from the Receiving party
- Initially used between airlines and/ or ground service providers
- Enhanced in 2014 based on industry requirements (multiple non-airline parties involved, clear liabilities for loss or damage, standardized paper format)

ULD CONTROL RECEIPT

ORIGINATOR (Originator's Name)	
(Transferring Party's Name)	_
(Transferring Party's Address)	(4)
(Transferring Party's SITA/ Email Address	, ·



	3 CONTROL RECEIPT NUMBER		
	(Receiving Party's Name)		
(5)	(Receiving Party's Address)		
\sim	(Receiving Party's SITA/ Email Address)		

CR
per
yout

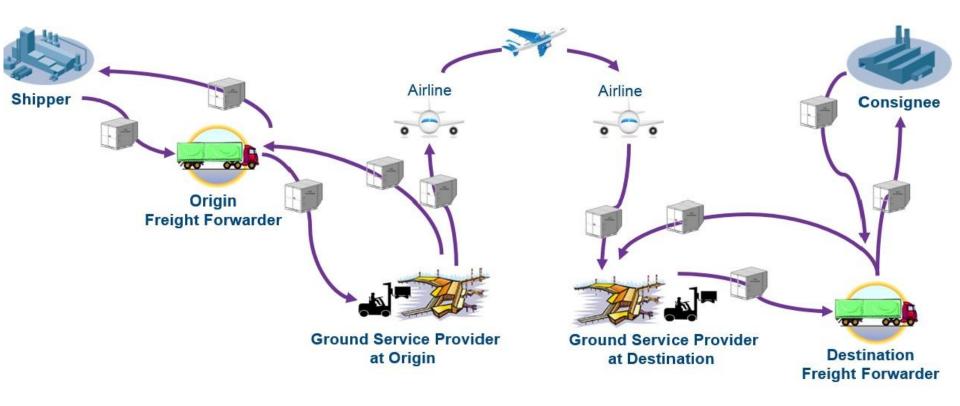
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TRAN	SFERRED BY	6	RECEIVED BY	7		TE OF TRANSFER YEAR	R	TIME LOCAL	TRANSFER POINT
								9	
*	TYPE CODE	IATA ULD ID CODE SERIAL NO.	OWNER	ULD SUPPORT EQUIPMENT Net Doors Straps Fittings	FINAL DESTINATION	DEMURRAGE CODE	DAM	ODLN CODE	DAMAGE DESCRIPTION
1									
2		(11)		(12)	(13)	(14)	(15)	(16)	(17)
3									
4				(12A)					
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\vdash	TRANSFERRING PARTY SIGNATURE DATE TIME RECEIVING PARTY SIGNATURE DATE TIME (RECEIVING PARTY NAME) (TRANSFERRING PARTY NAME)								

LIABILITY FOR LOSS OR DAMAGE.

Parties shall ensure that the unit load device (ULD) be handled in accordance with IATA ULD Regulations (ULDR)/ carrier's instructions/ owner's instructions. The use of a ULD is subject to provisions in applicable tariffs in effect as of the date hereof including provisions which are filed in accordance with the law. In particular, the Receiving Party shall be liable for demurrage if the ULD is held in excess of the time specified in the applicable tariff, the Receiving Party shall be liable for a non-return penalty as specified in the applicable tariff,

THE PARTY IN POSSESSION OF THE ULD SHALL ASSUME FULL RESPONSIBILITY TO THE ULD OWNER FOR THE AIRWORTHINESS OF THE ULD,

Recommendation: When a ULD is transferred, the Transferring Party should provide the Receiving Party a UCR.





Need for a Digital Standard

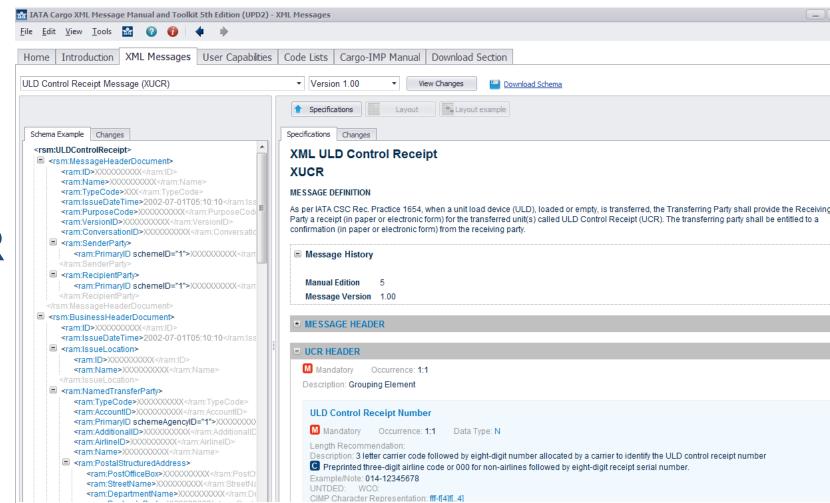
- ➤ Lack of Advanced Planning
- Poor Track and Trace
- ➤ Manual Entries in multiple systems
- > Processes inefficiencies



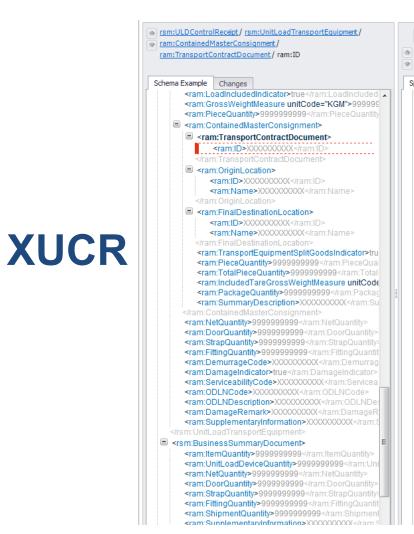
Development of Digital Standard (XUCR Message)

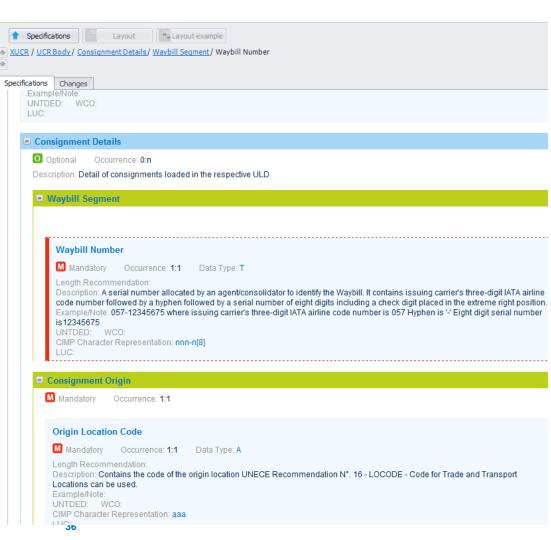
In order to remove paper UCR from daily operations and enable electronic exchange of UCR information in a standard format, the XML ULD Control Receipt (XUCR) Message is developed:

- Proposed by IATA ULD Board (ULDB)
- Supported by ULD CARE and IATA Cargo Messaging Working Group (CMWG)
- Based on paper UCR with additional enhancements
- Adopted by CSC
- > XUCR is Published in IATA Cargo-XML Manual and Toolkit 5th Edition and above









Benefits of XUCR Implementation

- Removing paper UCR and enabling electronic exchange of UCR information in standard format
- > facilitating ULD serviceability check during ULD transfer
- clarifying liabilities of the Transferring Party and the Receiving Party for loss or damage
- facilitating ULD tracking (currently by airport)
- > improving ULD stock checking efficiency and accuracy
- ➤ ULD Exchange Control (LUC) Message incorporated
- > electronic audit trail systematically established
- possibility of tracking the loaded contents (currently at AWB level)
- multimodal compatibility
- cross-border recognition by most customs systems



Next Step – Implementing XUCR Industry-wide

XUCR Message should be accepted by the airlines' and ground handlers' IT systems first

- Airlines and ground handlers should request the IT departments and/ or IT service providers to develop the XUCR based on <u>IATA Cargo-</u> XML Manual and Toolkit
- Seeking support from Cargo Committee and ULD Board/ ULD CARE
- Global promotion through media and industry events

IT Companies Signed Cargo-XML License

- Accenture
- Airports Bureau Systems Limited
- Axway France
- Azyra Systems
- Bertling EDI Service & IT GmbH (BESITEC)
- Boltrics Professionals BV
- British Telecommunications
- Cargo Community Network PTE LTD
- CARGO COMMUNITY SYSTEM SRL
- CargolT
- Cargonaut
- CCS Japan
- Champ Cargosystems
- Crimsonlogic
- Descartes

- DGOffice (DGM)
- GLS Hong Kong
- Hans Infomatic
- Hermes Logistics Technologies Ltd
- Hexaware
- Hong Kong R&D Centre for Logistics
- IBS Software Europe Ltd
- Kewill
- Magaya Corporation
- Mercator
- Mercator Solutions FZE
- Mphasis Limited
- New Age Software Solution
- Parse 2
- QID Technologies

- Riege Software International
- RTS Solutions
- SAP
- SITA
- Skyteam
- SoftCargo
- Software-AG
- Travel Technology Interactive do
 - Brasil
- UNCTAD
- Unisys
- Vixsoft Systems Limited
- · Webb Fontaine Holding, Inc.
- West Blue Consulting
- WIN Worldwide Information Network
- WiseTech Global

YourEDI

As of Sept 2017



XUCR, a key enabler of Interactive Cargo



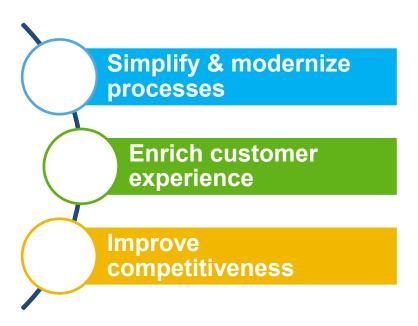
StB Cargo



StB Cargo: strengthen today, build tomorrow

A portfolio of projects to strengthen industry value proposition

A framework to foster innovative thinking and build new growth engine for long-term sustainability



The 6 goals of the program











Making air cargo easier, smarter and faster

A portfolio of projects

→ Accelerating change in the areas of: #Digitalization #Visibility #Safety





Interactive Cargo

Tracking at piece level

Sensors & data loggers

Internet of Cargo

Interactive Cargo & IATA Piece Level Tracking Task Force

Making Air Cargo Talk



Interactive Cargo

Making cargo talk



Vision

Responsive air cargo services based on intelligent systems able to self-monitor, send real-time alerts, respond to deviation to meet customers' expectations and report on the cargo journey to allow data-driven improvements.

Background

Air cargo customers demand more end-to-end visibility & real-time information about their shipments, especially with the growth of e-commerce. It's simple: online retailers & shoppers want to know where their shipments are at any time. This capability is imperative to improve the value proposition of air cargo & help our members to capitalize on e-commerce growth. Air cargo suppliers also need this information at an individual piece level to take proactive decisions to meet customers and regulators' expectations. This is valid for all types of products, but is becoming a critical requirement for Special Cargo (pharma, perishables, live animals, vulnerable, ...).

#Keywords

- Piece level Tracking (PLT) | Track & Trace | Serialization
- Instant notification | Connected Cargo | Self-monitored Cargo
- Smart ULD | Animal Care | Cargo WorldTracer
- Bar codes | RFID | Sensor & Data Logger | GPS
- Internet of Things (IoT)
- Wireless Technology IPv6 | 5G

2017 Objectives

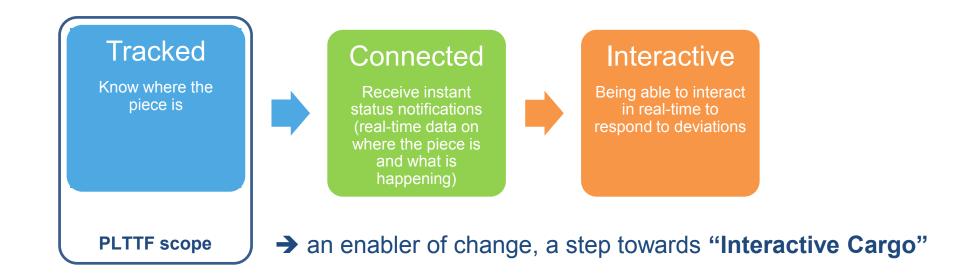
- Piece level Tracking: Recommended practice finalized.
- **Digital ID:**Recommended practice finalized
- Wireless Technologies:
 Position paper on Sensors &
 Data Loggers
- "Internet of Things":
 White paper presented

StB ___ |**Carg**©

Contact: Nadia Diagne

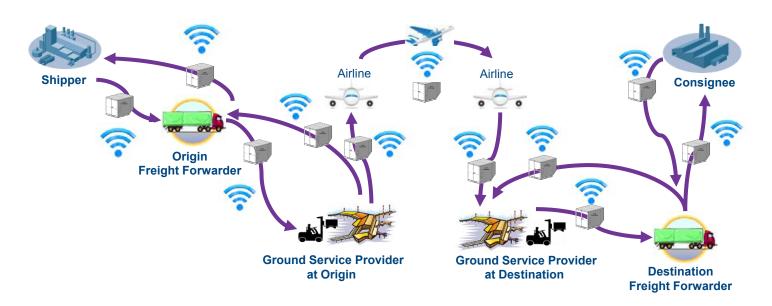
More info: iata.org/StB-Cargo

Tracking cargo at piece level



Increasing Demand for Interactive ULD

- Real-time global ULD tracking
- Tracking the contents loaded
- → Monitoring the ULD/ contents conditions (temperature, shock, tampering)



Challenges – Unclear Industry Preference

- > Whether XUCR should be further enhanced to include Unique Piece Identification?
- > XML Unit Load Device Manifest (XFUM) Message vs. XUCR?
- ➤ Variety of wireless technologies, Bluetooth Low Energy (BLE), GPS, RFID, etc.
- > Continued wireless communication on board aircraft?





IATA Support:

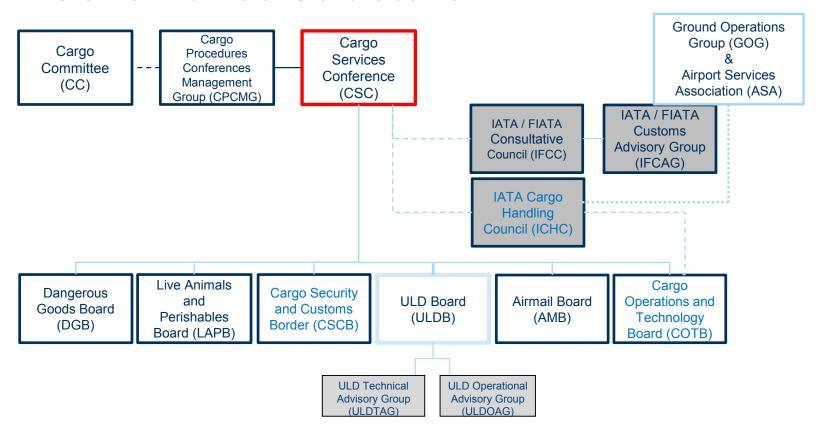
- ULD related matters: LIAO Zhi Yong (<u>liaozy@iata.org</u>)
- Messaging specifications: Tahir SYED (<u>syedt@iata.org</u>)
- Publication Product Manager: Nicolas CARLONE (<u>carlonen@iata.org</u>)
- Publication Online Store:

http://www.iata.org/publications/store/Pages/cargo-xml-tookit.aspx



ULDB Governance Structure

ULDB Governance Structure



ULDB Membership

No.	ULDB	Members		Terms	of Office	
1	Randolph Chappell (5X)	VICE CHAIR	2017	2018	2019	2020
2	Guillaume Roveri (AF)		2017	2018	2019	2020
3	Vacant		2017	2018	2019	2020
4	Alexander Bayer (LH)		2017	2018	2019	
5	David Dubois (CV)		2017	2018	2019	
6	Frits Roukens (KL)		2017	2018	2019	
7	Manoj Menon (EK)		2017	2018		
8	David M Lee (FX)	CHAIR	2017	2018		
9	Edwin Greer (UA) Resigned					
10	Blair DuBois (5Y)		2017			
11	Frank Steinert (D0)		2017			
12	Jimmy Gaylor (DL)		2017			

ULDTAG Membership

No.	Name	Title	Company	Category	
1.	Blair DuBois	Chief Engineer of Cargo Engineering	Atlas Air	Airlines	
2.	Michael Kirn	Manager, Cargo Operations Engineering	Emirates]	
3.	Ulf Hartmann (Facilitator)	Technical Director Zodiac Air Cargo Equipment		ULD/ accessories manufacturers	
4.	Stephan Herdtle	Itle Head of Production DoKaSch GmbH		(container, pallet, net	
5.	Thomas Pherson	President	Cargo Composites	and strap)	
6.	Jonathan Neeld	Director of Certification & Regulatory Compliance	CSafe Global	TCC manufacturers	
7.	Peter Orre	Quality Manager & Head of QRM	Envirotainer Engineering AB		
8.	James Homewood	Chief Engineer	AmSafe Bridport	FCC/ FRC	
9.	Vince Voong	Vice President, Sales & Purchasing	Satco Inc	manufacturers	
10.	John Stewart	Executive Vice President	ACL Airshop LLC	ULD repair stations	
				CLS manufacturers	
11.	Javier Martinez Marina	A320 Fam. Cargo Definition Mngr & Cargo Standards	Airbus S.A.S.	Aircraft manufacturers	
12.	Joan Hughson	Aerospace Engineer, Aircraft Certification	FAA	Invited CAAs	
13.	Jean-Jacques Machon	ULD Consultant	JMJ Consulting	Chairman or Vice	
14.	Hans van Rooijen	Manager Sales & Business Development EMEA	Nordisk Aviation Products	Chairman of ISO TC 20/ SC 9 and SAE AGE-2A	

ULDOAG Membership

No.	Name	Title	Company	Category	
1.	Huanqing Loke	Executive (ULD)	Singapore Airlines Cargo	Airlines	
2.	Olav De Haan	Vice President Cargo Operations	dnata Netherlands	Ground Service Providers	
3.	Joseph Chan	Manager, Quality Assurance & Service Improvement	Jardine Airport Services Ltd.		
				Freight Forwarders/ Shippers/ Truckers	
4.	Peter Orre	Quality Manager & Head of QRM	Envirotainer Engineering AB	ULD/ accessories manufacturers (container, pallet, net and strap)	
5.	Bob Rogers (Facilitator)	Senior Advisor	Nordisk Aviation Products		
6.	Tharindu Senanayake	Senior Sales Manager	AmSafe Bridport		
7.	Javier Martinez Marina	A320 Fam. Cargo Definition Mngr & Cargo Standards	Airbus S.A.S.	Aircraft manufacturers	
				GSE manufacturers	
				CLS manufacturers	
8.	Charles Drummond	Director Global Operations	Unilode Aviation Solutions	ULD Service Providers	
9.	John Stewart	Executive Vice President	ACL Airshop LLC		
				Airports and/ or Airports Council International (ACI)	
10.	Patricia Williams/ Steven Fox	Cargo Focus Team (CFT)	FAA	Invited CAAs	
11.	Urs Wiesendanger	President	ULD CARE	ULD CARE Representative	

ULDB Upcoming Meetings

Meeting	Date	Location	
Air Cargo Handling/ ULD CARE/	19-22	Budapest, Hungary	
ULDB face-to-face meeting	September 2017	•	
		CARE)	
SAE AGE-2A Spring meeting	3-5 May 2018	Dubai, UAE	
ULDB face-to-face meeting		(hosted by Emirates)	

Proposed Amendment to ULDR

 Conduct ULDR safety risk assessment of Section 6 ensuring no specifications exceed aircraft Operating Limitations
 <u>Example of Finding</u>

OS 6/01 Aircraft Pallets Operation

- 4.2.2 Whenever the aircraft type is unknown at the time of build-up, a maximum area load limitation of 1000 kg/m² (200 lb/ft²) for SS 50/1 (AS 1491B, ISO 4171) pallets, or 2000 kg/m² (400 lb/ft²) for 16 ft and 20 ft SS 50/9 (AS 1130F, ISO 4117) or similar thick heavy duty pallets, may be used.
- 2. Re-write OS 6/00 for ULD Serviceability Check
- 3. Re-write OS 6/07 to ensure no potential safety risk of exceeding aircraft Operating Limitations
- 4. Amend SS 40/1 Attachment 'A' Pallet and Net Compatibility Matching Methods

IATA Updates at ULD CARE

- 5. Completely delete OS 6/17 for sling/ steel cable because no instructions for sling/ steel cable are currently provided in aircraft WBM
- 6. Develop recommendation on requirement for lashing line
- 7. Amend Section 5 SS 50/2 Net Corner Ropes Identification
- 8. Amend Section 7 SS 40/0 Nets optional markings and SS 40/3 Attachment 'C' ODLN for Pallet Nets to add certification configuration codes of compatible pallets to the net's ODLN

Highlights of ULDB/47

- Implementation of XML ULD Control Receipt (XUCR) Message
- Accessibility of ULD Operational Limitations Values
- The Proposed New Incident Database: ULD Data Review
- Proposed Amendment to AHM 965, 966 and 967
- Proposed Amendment to AHM 311 Securing of Load
- > Proposed Amendment to IOSA/ ISAGO Standards Manuals
- > Additional proposed amendments to ULDR

ULD Safety Campaign Local Outreach

The 5 Key Messages

- 1. ULDs are aircraft parts and are CRITICAL to flight safety
- 2. Correct ULD handling ensures safety
- 3. Safety is everybody's responsibility
- 4. Correct ULD handling reduces costs & improves efficiency
- 5. IATA ULD Regulations facilitate industry compliance



























What have been achieved?

The industry continues to promote the ULD Safety Campaign after its launch

- 20+ organizations officially confirmed in writing to advocate
- 800+ stakeholders requesting artwork package
- 40+ organizations requested for customized versions
- Senior management support
- Media coverage (Press Release, Industry Articles, Social Media)
- ULD Awareness Quizzes
- Air India ULD damage rate dropped from 30~35% to 10~15%; ULD related findings in the various inspections carried out by safety regulators dropped to zero
- Regional outreach kicked off by North Asia and The Americas



























IATA North Asia **ULD Safety Campaign** Workshops



























- Locations: Beijing, Xiamen and Guangzhou
- Target audience:

Government regulators, Airlines, Airport Authorities, Industry Associations, Ground Service Providers, Freight Forwarders/ Cargo Agents, etc. responsible for but not limited to the following tasks/ functions:

- Development of Flight Safety regulations and standards
- Safety Management
- Training Management
- Ground/ Ramp Operations
- Cargo Operations
- Aircraft Loading of ULD/ Cargo and Aircraft Weight & Balance Control
- Aircraft ULD Continued Airworthiness Management



























Workshop Agenda:

- Aircraft ULD and Flight Safety
- IATA ULD Regulations (ULDR)
- Updates on the latest regulatory requirements for ULD Operations
- Introduction to Aircraft Weight & Balance Manual and how to ensure compliance
- Discussion: Restraint of Special Cargo Loads (Overweight, Outsized, Odd Shaped, Sharp or Piercing, Vehicle, Aircraft Engine, etc.)
- Discussion: Requirements for Non-airline ULD Operational Staff
- Discussion: Topics raised by Chinese delegates Local Challenges





























Promotion in The Americas



























ULD, no es solo una caja...

Entrega lo que prometió



El incorrecto manejo del ULD daña sus ganancias y reputación

www.iata.org/ULD







ULD, it's not just a box...

Correct handling will save you millions

ULD repairs cost the industry

80%





www.iata.org/ULD







ULD Campaña de Seguridad

ULD, no es solo una caja...

Es su responsabilidad

No dañe los ULDs

v aeronave

al ULD

No olvide realizar

inspecciones por daño

No maneje ULDs si usted

capacitado para hacerlo

No ignore las limitaciones

de carga de la aeronave

durante el proceso de

acomodo del ULD

no está propiamente

No exponga la seguridad

de los pasajeros, tripulación

- Maneje el ULD con cuidado. es parte de la aeronave
- Proteja la vida de los pasajeros, tripulación y aeronave cargando ULDs en buen estado
- Inspeccione los ULDs antes de su uso y en cada punto de tránsito
- Asegúrese que sus empleados y proveedores de servicio se encuentran propiamente capacitados
- Recuerde que el acomodo de ULD es una fase de precarga de la aeronave y contribuye a la seguridad de vuelo







































You Are the Champions!

Promote the <u>ULD Safety Campaign</u> within your network































www.iata.org/ULD





dnata 7474



Thank You!

LIAO, Zhi Yong Manager, Cargo Business Process & Standards <u>liaozy@iata.org</u>

To represent, lead and serve the airline industry



